

REMARKS

By this Amendment, Applicant has cancelled claims 1-20, without prejudice or disclaimer of the subject matter thereof, and has added new claims 21-32 to protect aspects of the invention. Claims 21-32 are fully supported by the original specification. See, e.g., specification at lines 7-27 on page 5 and lines 4-20 on page 7, and Figs. 3 and 4. Claims 21-32 are pending.

In the Office Action, the Examiner rejected claims 1-5, 7-9, and 11-19 under 35 U.S.C. 102(b) as being anticipated by Sawasaki et al. (US 2001/0026347A1), and rejected claims 6, 10, and 20 under 35 U.S.C. 103(a) as being unpatentable over Sawasaki et al.

The rejections of claims 1-20 are rendered moot, in view of the cancellation thereof. New claims 21-32 are patentable over Sawasaki et al. for the following reasons.

Independent claim 21 recites, inter alia, "a second substrate having a plurality of first areas and a plurality of second areas, wherein . . . a surface of the second substrate is higher in the first areas than in the second areas; . . . a plurality of first protrusions disposed on the first substrate and substantially contacting the first areas of the second substrate; and a plurality of second protrusions disposed on the first substrate corresponding to the second areas of the second substrate, tops of the second protrusions separated from the second areas of the second substrate by a predetermined distance."

Sawasaki et al. fails to teach or suggest at least these features of claim 21. Sawasaki et al. is directed to liquid crystal display devices with spacers and projections

having different heights formed on a color filter (CF) substrate. See Sawasaki et al., ABSTRACT. For example, in Fig. 39, spacers 225a and 225b having different heights are formed on CF substrate 220. Sawasaki et al., paragraph [0222] on page 13 and paragraph [0225] on page 14. For another example, in Fig. 48, spacers 251 and 252 having different heights are formed on CF substrate 240. Sawasaki et al., paragraphs [0272] and [0278] on page 17. However, in Fig. 39, spacers 225a and 225b do not correspond to first areas and second areas of TFT substrate 210 (Sawasaki et al., paragraph [0222] on page 13), where a surface of TFT substrate 210 is higher in the first areas than in the second areas. Instead, the areas of substrate 210 confronting spacers 225a and 225b, are at the same height. In Fig. 48, spacers 251 and 252 do not correspond to first areas and second areas of TFT substrate 230 (Sawasaki et al., paragraph [0272] on page 17), where a surface of TFT substrate 230 is higher in the first areas than in the second areas. Instead, the areas of substrate 230 confronting spacers 251 and 252, are at the same height.

Therefore, Sawasaki et al. fails to teach or suggest, at least, “a second substrate having a plurality of first areas and a plurality of second areas, wherein . . . a surface of the second substrate is higher in the first areas than in the second areas; . . . a plurality of first protrusions disposed on the first substrate and substantially contacting the first areas of the second substrate; and a plurality of second protrusions disposed on the first substrate corresponding to the second areas of the second substrate, ~~the top~~ of the second protrusions separated from the second areas of the second substrate by a predetermined distance,” as required by independent claim 21. Independent claim 21 and its dependent claims 22-26 are thus patentable over Sawasaki et al.

In addition, independent claim 27 recites, inter alia, “a thin film transistor substrate having a plurality of first areas and a plurality of second areas, wherein the first areas and the second areas are on a side of the thin film transistor substrate facing the color substrate, and a surface of the thin film transistor substrate is higher in the first areas than in the second areas; . . . a plurality of first protrusions disposed on the first areas of the thin film transistor substrate and substantially contacting the color filter substrate; and a plurality of second protrusions disposed on the second areas of thin film transistor substrate, tops of the second protrusions separated from the color filter substrate by a predetermined distance.”

Sawasaki et al. fails to teach or suggest at least these features of claim 27. As noted above, Sawasaki et al. is directed to liquid crystal display devices with spacers and projections having different heights formed on a color filter (CF) substrate, NOT on a thin film transistor substrate. See Sawasaki et al., ABSTRACT. For example, in Fig. 39, spacers 225a and 225b having different heights are formed on CF substrate 220. The areas of TFT substrate 210 confronting spacers 225a and 225b, are at the same height. Sawasaki et al., paragraph [0222] on page 13 and paragraph [0225] on page 14. In Fig. 48, spacers 251 and 252 having different heights are formed on CF substrate 240. The areas of TFT substrate 230 confronting spacers 251 and 252, are at the same height. Sawasaki et al., paragraphs [0272] and [0278] on page 17. Sawasaki et al. does not teach or suggest at least “a thin film transistor substrate having a plurality of first areas and a plurality of second areas, wherein . . . a surface of the thin film transistor substrate is higher in the first areas than in the second areas; . . . a plurality of first protrusions disposed on the thin film transistor substrate in the first areas and

substantially contacting the color filter substrate; and a plurality of second protrusions disposed on the thin film transistor substrate in the second areas, tops of the second protrusions separated from the color filter substrate by a predetermined distance," as required by independent claim 27. Therefore, independent claim 27 and its dependent claims 28-32 are patentable over Sawasaki et al.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of pending claims 21-32.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

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By: 

Qingyu Yin
Ltd. Rec. No.: L0222